

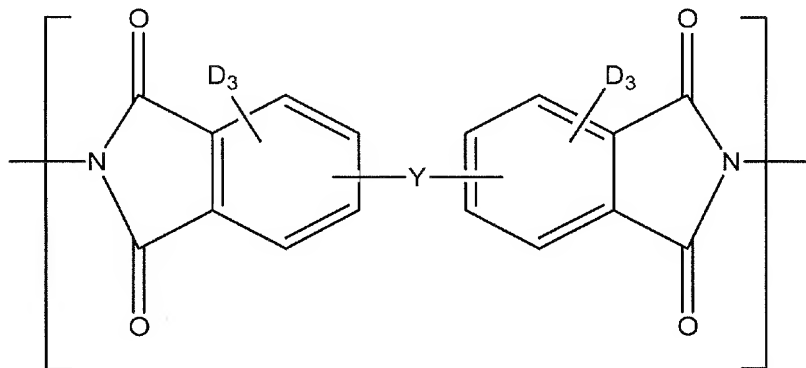
**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (currently amended): A deuterated polyimide, the backbone of which comprises an alternation between:

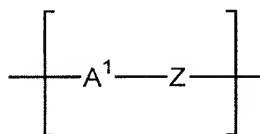
- at least one repeat unit corresponding to the following formula (I):



(I)

in which:

- Y represents a single bond, -O-, or -CO- ~~or a spacer group~~; and
- at least one repeat unit corresponding to the following formula (II):



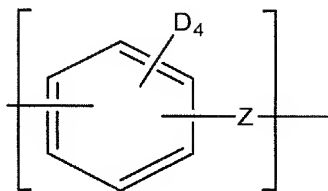
(II)

in which:

- A<sup>1</sup> represents a perdeuterated aromatic group comprising from 6 to 10 carbon atoms; and
- Z represents a single bond or a group chosen from -O-C<sub>6</sub>D<sub>4</sub>-, -CO-C<sub>6</sub>D<sub>4</sub>- and -C<sub>6</sub>D<sub>4</sub>-.

Claim 2 (canceled).

Claim 3 (previously presented): The deuterated polyimide as claimed in claim 1, in which the repeat unit in accordance with the formula (II) is a repeat unit of following formula (IIa):

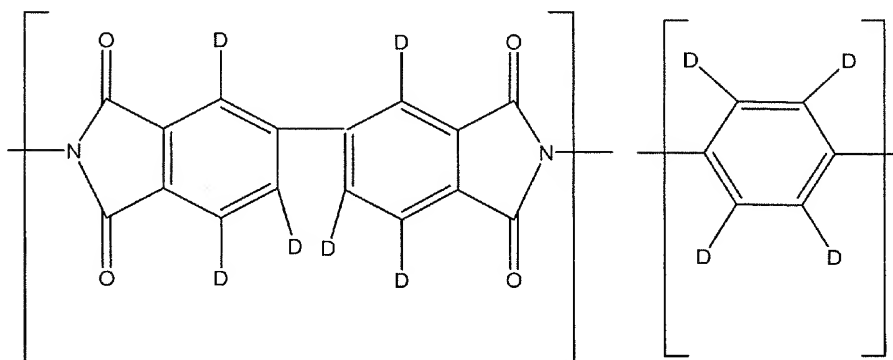


(IIa)

in which Z corresponds to the same definition as that given in claim 1.

Claim 4 (currently amended): The deuterated polyimide as claimed in claim 1, chosen from the group consisting of the polyimides chosen from:

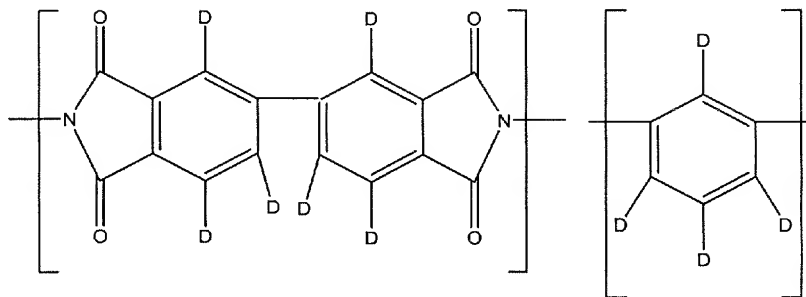
- polyimides comprising a repeat unit of following formula (Ia) and a repeat unit of following formula (IIb):



(Ia)

(IIb)

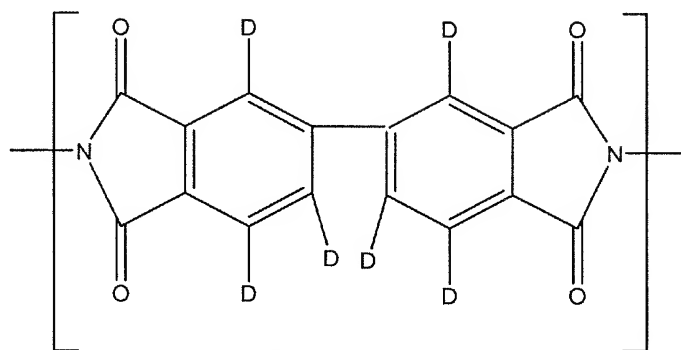
- polyimides comprising a repeat unit of following formula (Ia) and a repeat unit of following formula (IIc):



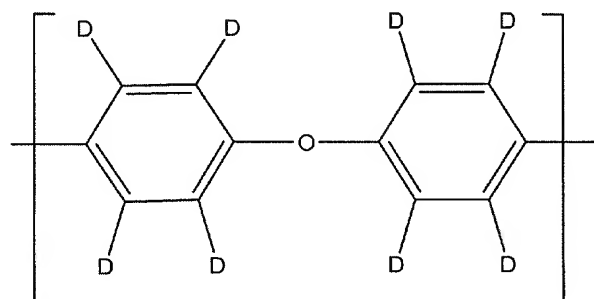
(Ia)

(IIc)

- polyimides comprising a repeat unit of following formula (Ia) and a repeat unit of following formula (IIId):

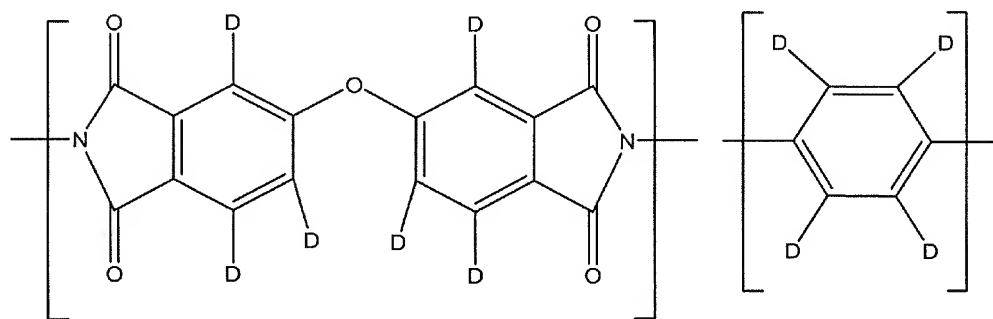


(Ia)

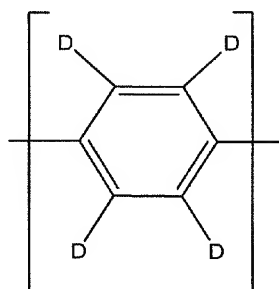


(IIId)

- polyimides comprising a repeat unit of following formula (Ib) and a repeat unit of following formula (IIb):

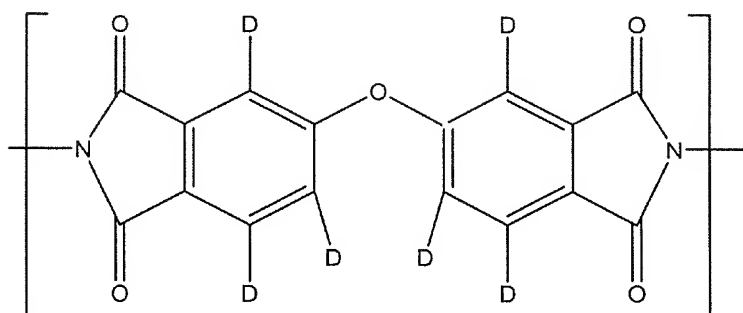


(Ib)

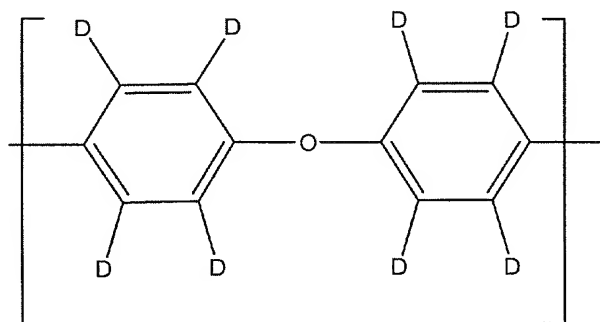


(IIb)

- polyimides comprising a repeat unit of following formula (Ib) and a repeat unit of following formula (IIId):

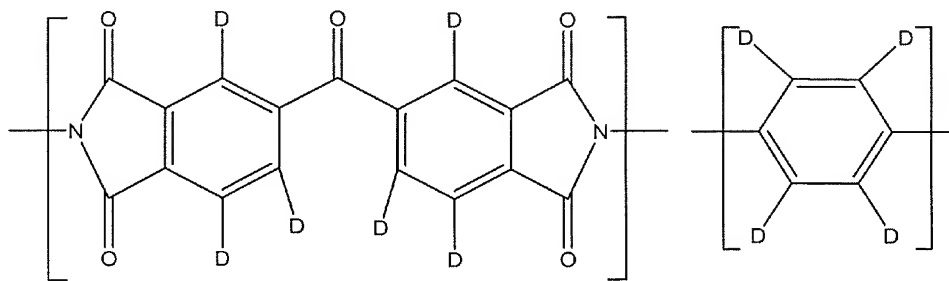


(Ib)

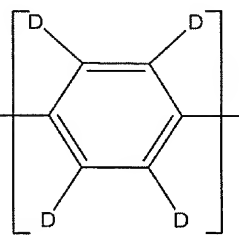


(IIId)

- polyimides comprising a repeat unit of following formula (Ic) and a repeat unit of following formula (IIb):

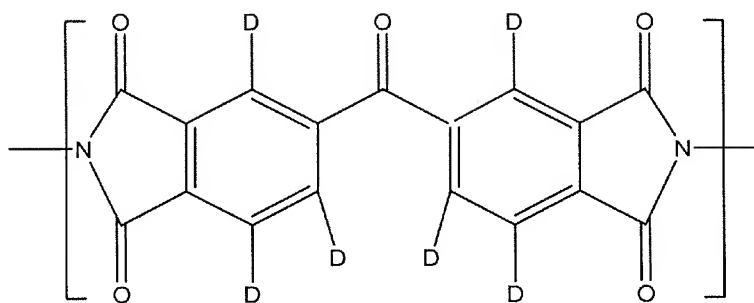


(Ic)

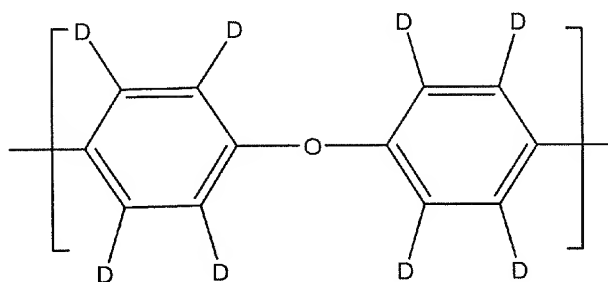


(IIb)

- polyimides comprising a repeat unit of following formula (Ic) and a repeat unit of following formula (IIId):

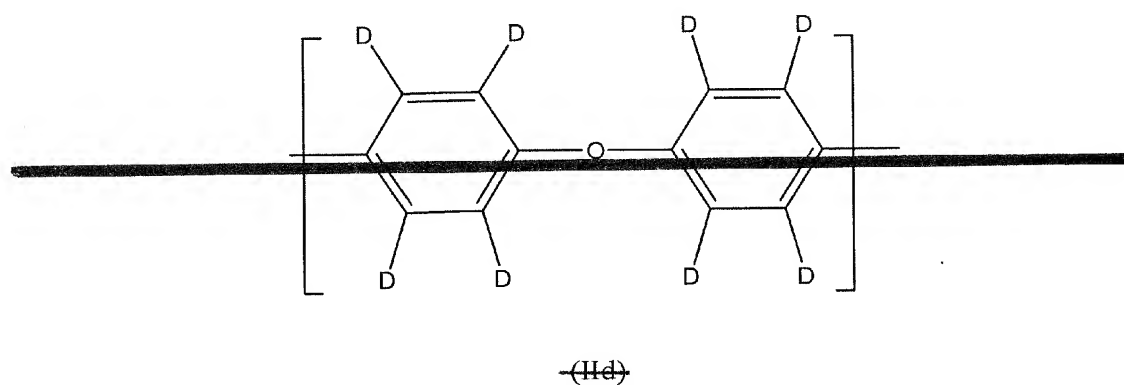
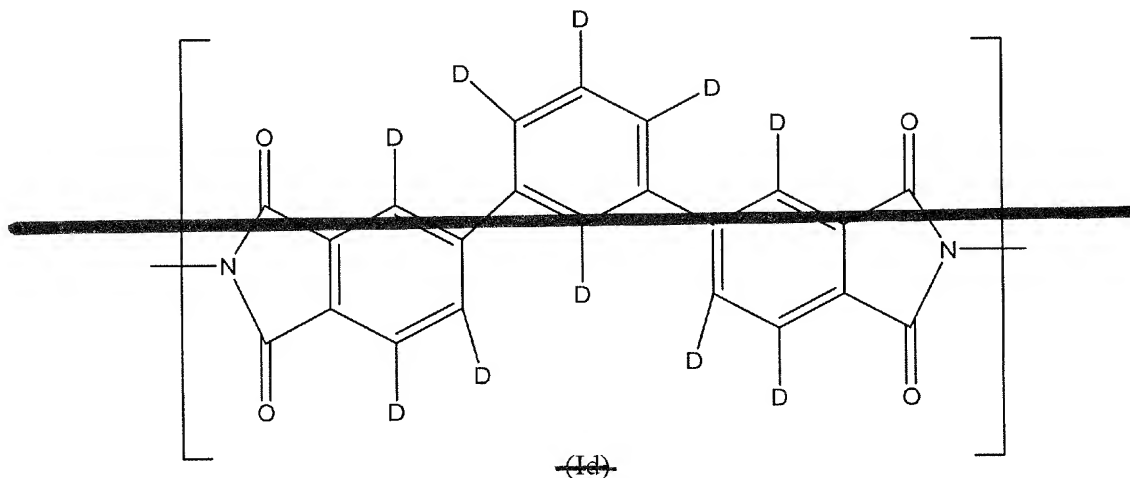


(Ic)

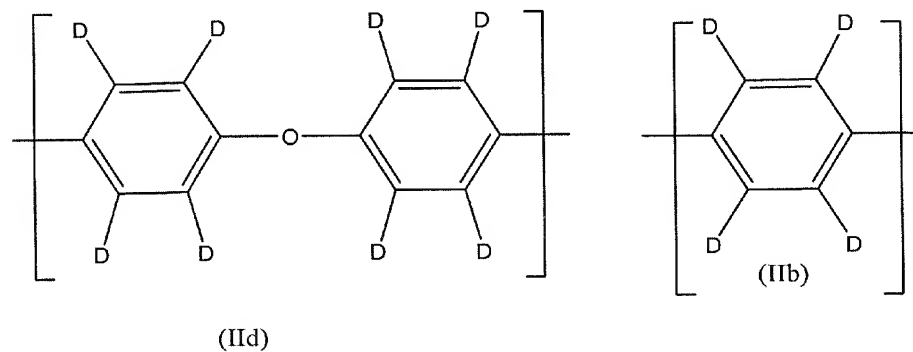
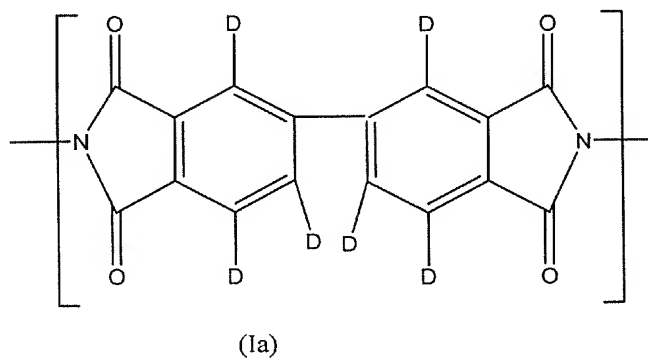


(IIId)

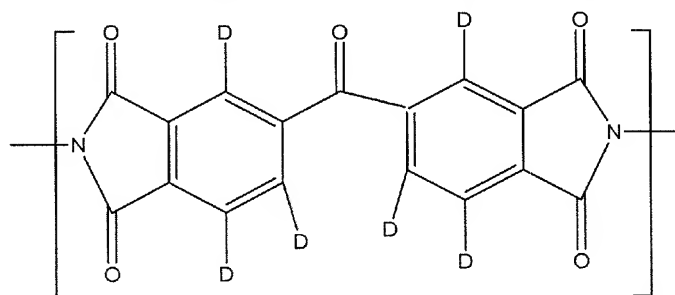
—polyimides comprising a repeat unit of following formula (Id) and a repeat unit of following formula (IIId):



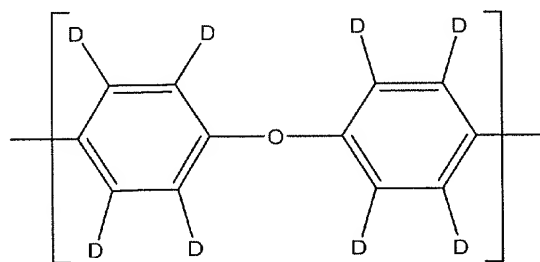
- polyimides comprising a repeat unit of following formula (Ia), a repeat unit of following formula (IIb) and a repeat unit of following formula (IIc):



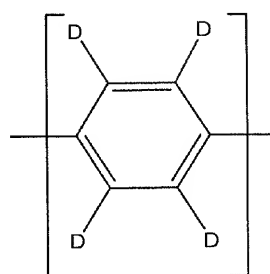
- polyimides comprising a repeat unit of following formula (Ic), a repeat unit of following formula (IIb) and a repeat unit of following formula (IIId):



(Ic)

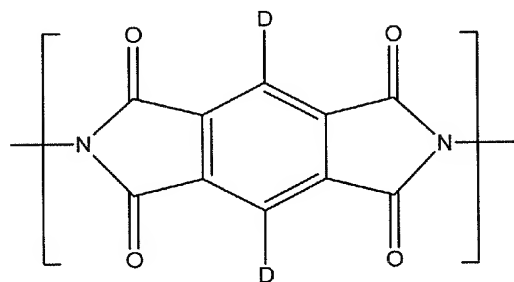


(IIId)



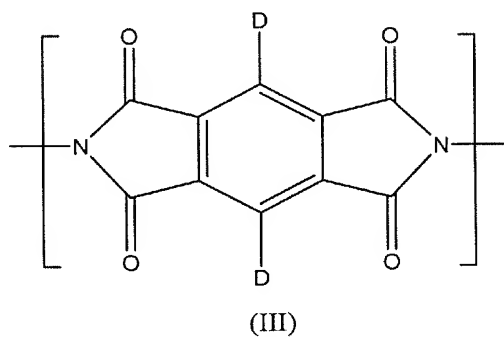
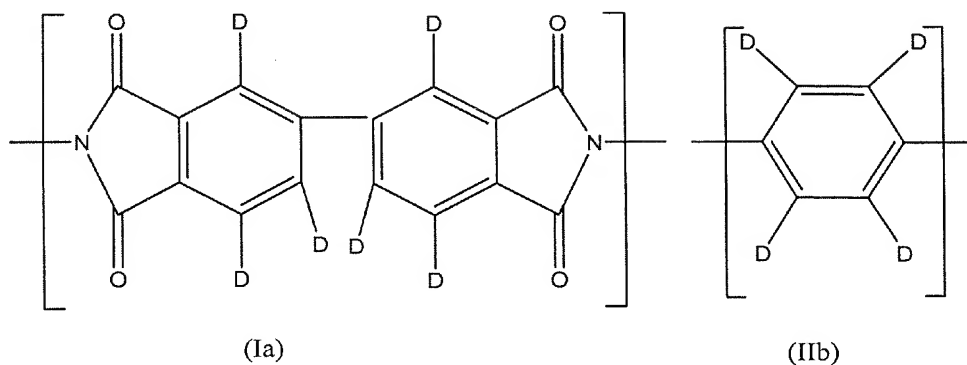
(IIb)

Claim 5 (previously presented): The deuterated polyimide as claimed in claim 1, additionally comprising a unit corresponding to the following formula (III):



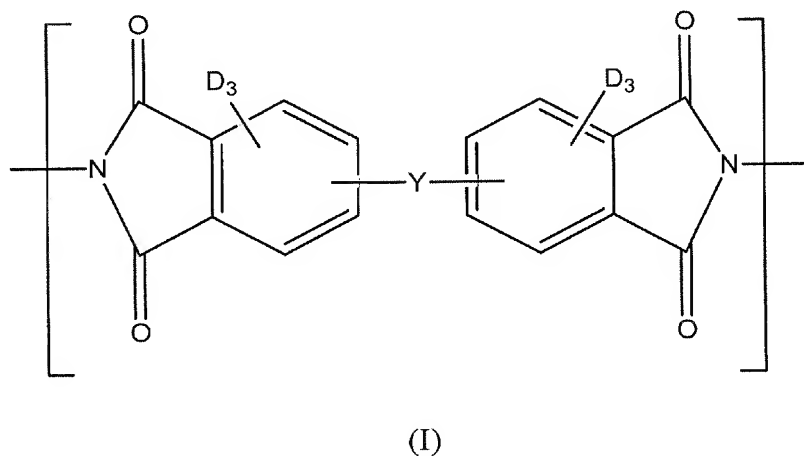
(III)

Claim 6 (previously presented): The deuterated polyimide as claimed in claim 5, comprising a repeat unit of following formula (Ia), a repeat unit of following formula (IIb) and a repeat unit of following formula (III):



Claim 7 (currently amended): A process for the preparation of a deuterated polyimide, the backbone of which comprises an alternation between:

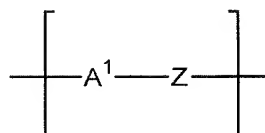
- at least one repeat unit corresponding to the following formula (I):



in which:

- Y represents a single bond, -O-, or -CO- ~~or a spacer group~~; and
- at least one repeat unit corresponding to the following formula (II):

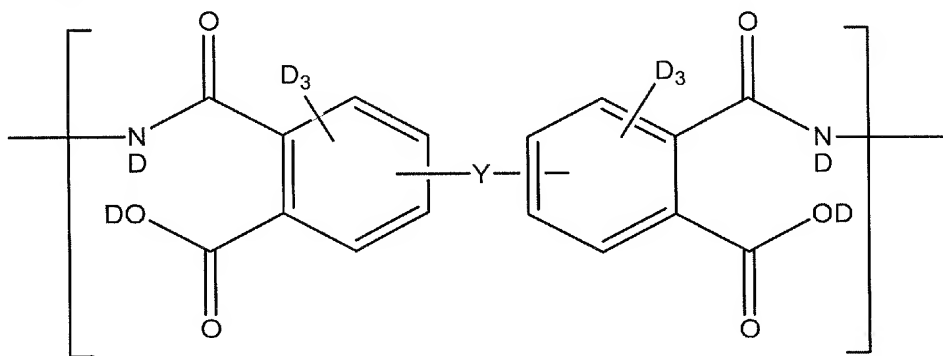




(II)

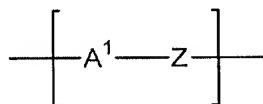
in which:

- A<sup>1</sup> represents a perdeuterated aromatic group comprising from 6 to 10 carbon atoms; and
  - Z represents a single bond or a group chosen from -O-C<sub>6</sub>D<sub>4</sub>-, -CO-C<sub>6</sub>D<sub>4</sub>- and -C<sub>6</sub>D<sub>4</sub>-;
- said process comprising a stage consisting in treating, by heating at an appropriate temperature, a solution of a poly(amide-acid), the backbone of which comprises an alternation between at least one repeat unit of following formula (IV):



(IV)

in which Y corresponds to the same definition as that given above; and  
 at least one repeat unit of formula (II):

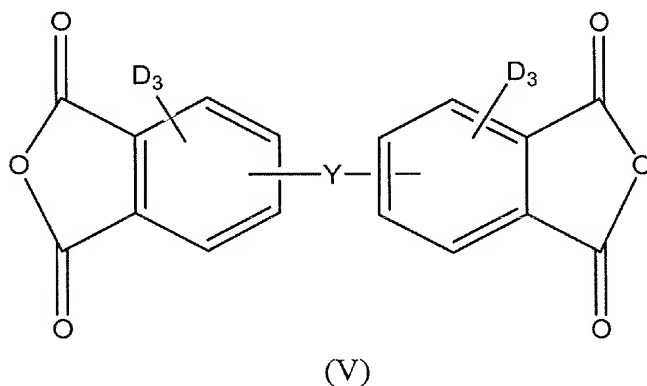


(II)

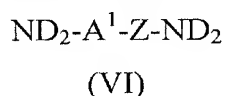
in which A<sup>1</sup> and Z correspond to the same definitions as those given above,  
 the appropriate heating temperature being determined so as to obtain complete imidization of  
 said poly(amide-acid).

Claim 8 (original): The preparation process as claimed in claim 7, in which the appropriate heating temperature is a temperature ranging from 80 to 400°C.

Claim 9 (previously presented): The preparation process as claimed in claim 7, in which the poly(amide-acid) solution is prepared by polycondensation, in a solvent, of at least one monomer of following formula (V):



in which Y corresponds to the same definition as that given in claim 7, and of at least one monomer of following formula (VI):



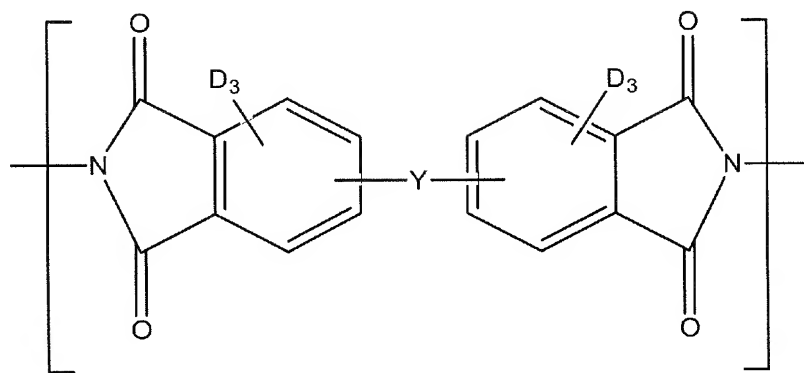
in which A<sup>1</sup> and Z correspond to the same definitions as those given in claim 7.

Claim 10 (previously presented): The preparation process as claimed in claim 7, in which the solvent is a dipolar aprotic solvent chosen from the group consisting of N-methylpyrrolidone (NMP), dimethylformamide (DMF) and dimethylacetamide (DMAC).

Claims 11-14 (canceled).

Claim 15 (currently amended): A film based on a deuterated polyimide, the backbone of which comprises an alternation between:

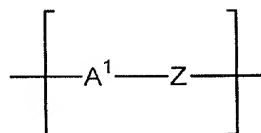
- at least one repeat unit corresponding to the following formula (I):



(I)

in which:

- Y represents a single bond, -O-, or -CO- ~~or a spacer group~~; and
- at least one repeat unit corresponding to the following formula (II):



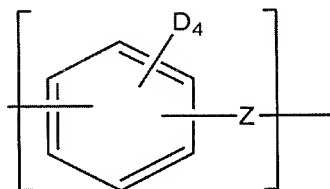
(II)

in which:

- A<sup>1</sup> represents a perdeuterated aromatic group comprising from 6 to 10 carbon atoms; and
- Z represents a single bond or a group chosen from -O-C<sub>6</sub>D<sub>4</sub>-, -CO-C<sub>6</sub>D<sub>4</sub>- and -C<sub>6</sub>D<sub>4</sub>-.

Claim 16 (canceled).

Claim 17 (currently amended): The deuterated polyimide as claimed in claim 1 ~~claim 2~~, in which the repeat unit in accordance with the formula (II) is a repeat unit of following formula (IIa):

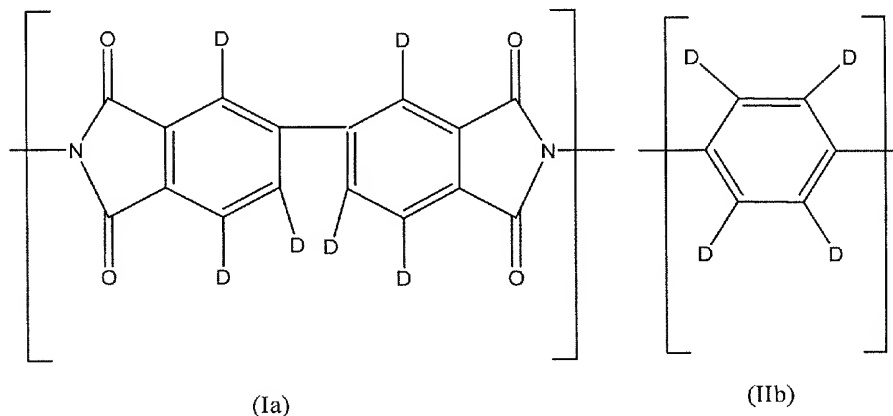


(IIa)

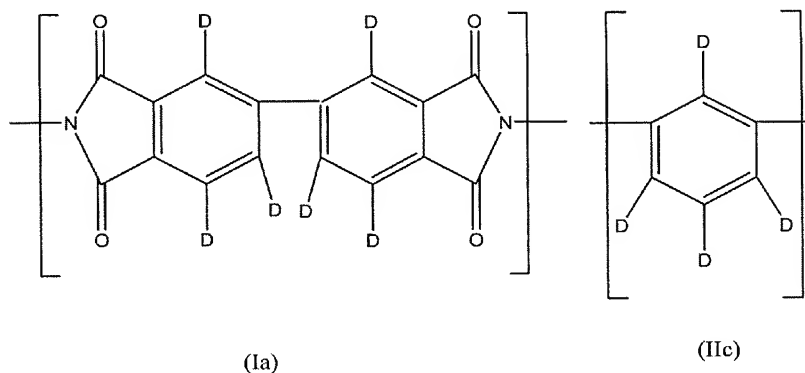
in which Z corresponds to the same definition as that given in claim 1.

Claim 18 (currently amended): The deuterated polyimide as claimed in claim 1 ~~claim 3~~, chosen from the group consisting of the polyimides chosen from:

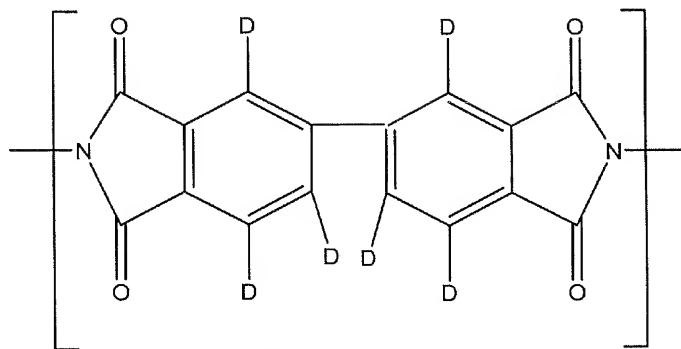
- polyimides comprising a repeat unit of following formula (Ia) and a repeat unit of following formula (IIb):



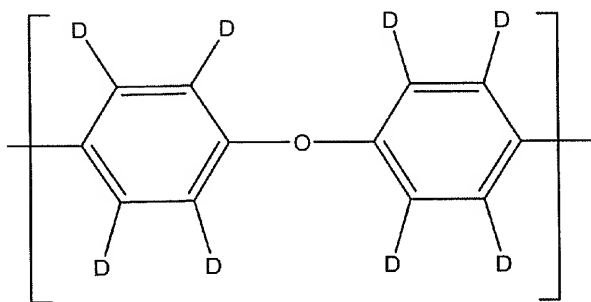
- polyimides comprising a repeat unit of following formula (Ia) and a repeat unit of following formula (IIc):



- polyimides comprising a repeat unit of following formula (Ia) and a repeat unit of following formula (IId):

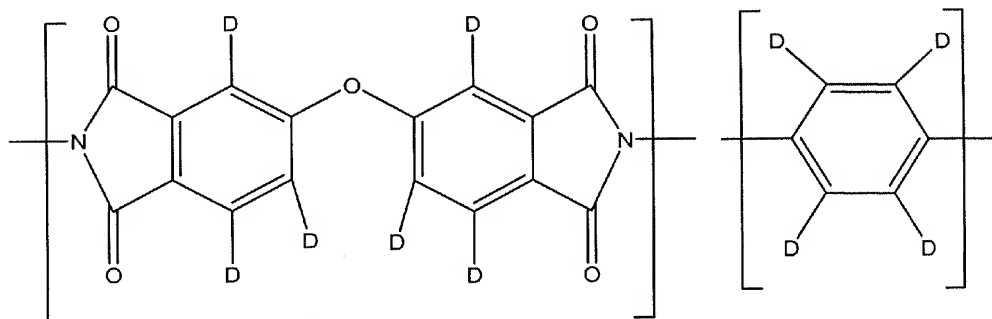


(Ia)

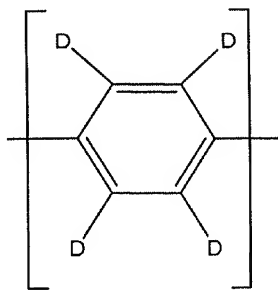


(IIId)

- polyimides comprising a repeat unit of following formula (Ib) and a repeat unit of following formula (IIb):

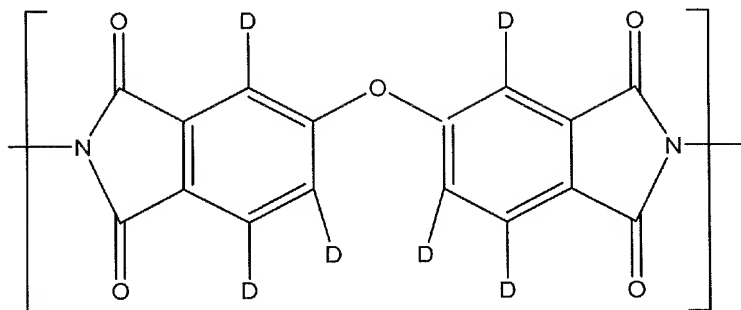


(Ib)

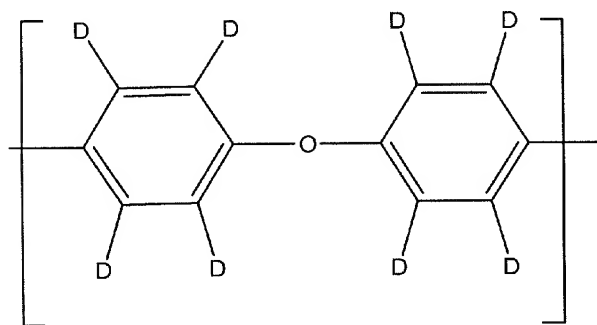


(IIb)

- polyimides comprising a repeat unit of following formula (Ib) and a repeat unit of following formula (IIId):

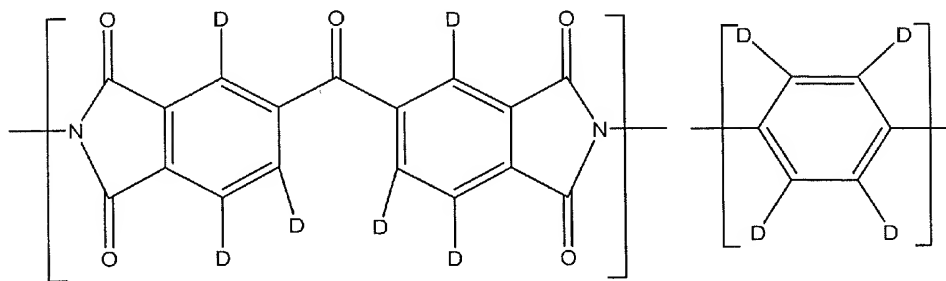


(Ib)

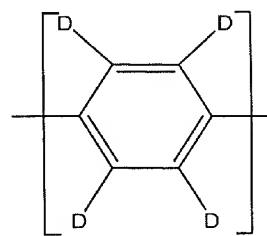


(IIb)

- polyimides comprising a repeat unit of following formula (Ic) and a repeat unit of following formula (IIb):

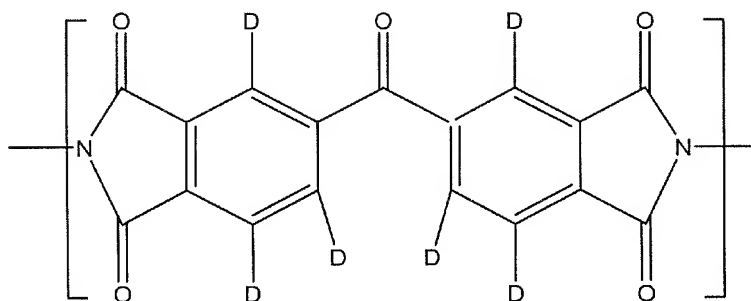


(Ic)

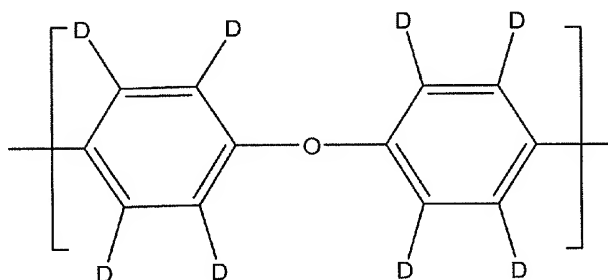


(IIb)

- polyimides comprising a repeat unit of following formula (Ic) and a repeat unit of following formula (IIb):

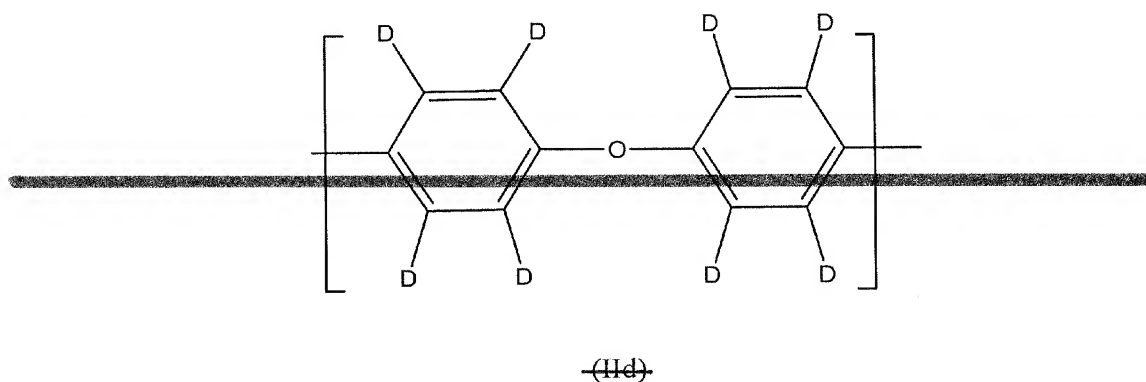
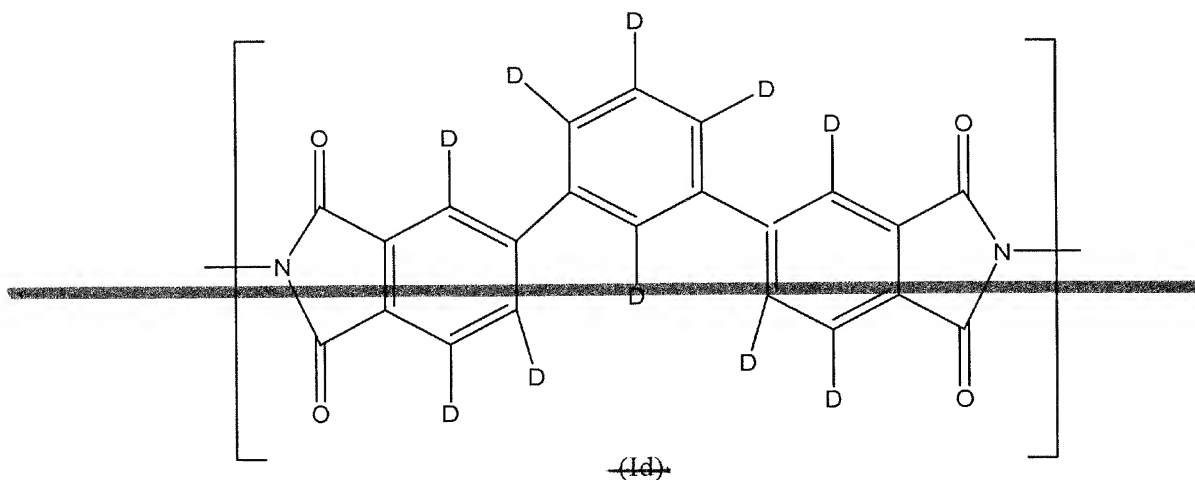


(Ic)

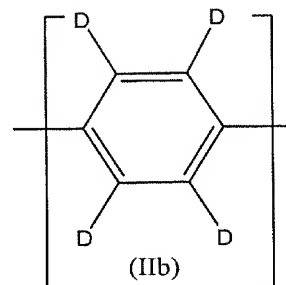
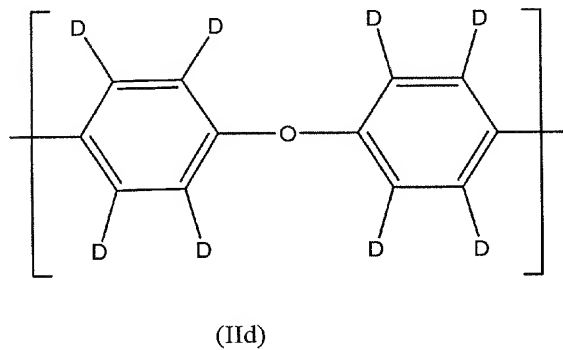
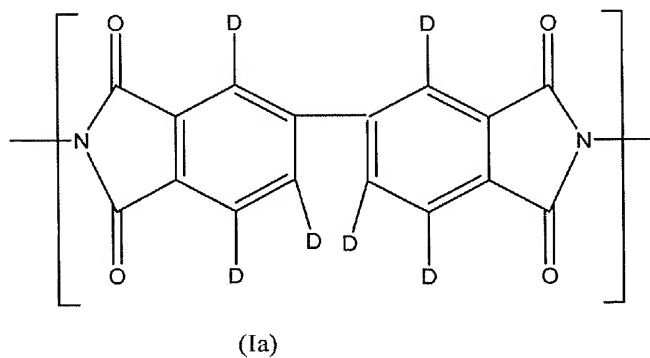


(IIId)

~~polyimides comprising a repeat unit of following formula (Id) and a repeat unit of following formula (IIId):~~

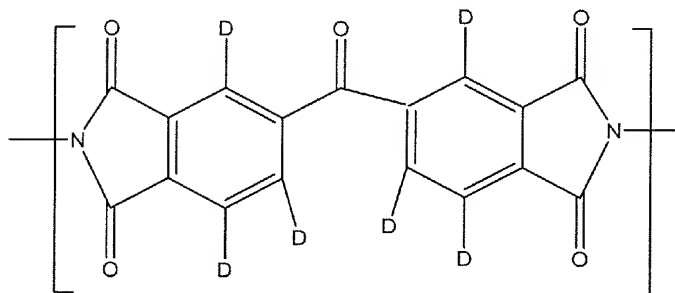


- polyimides comprising a repeat unit of following formula (Ia), a repeat unit of following formula (IIb) and a repeat unit of following formula (IIc):

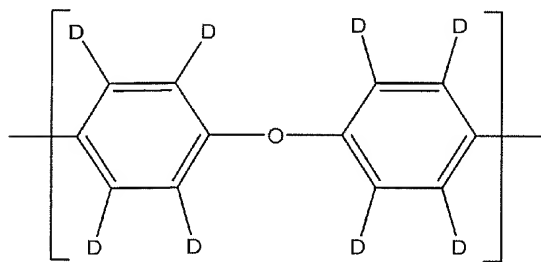




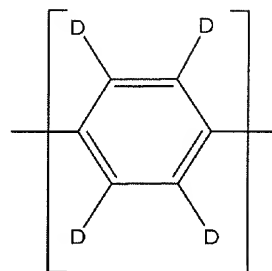
- polyimides comprising a repeat unit of following formula (Ic), a repeat unit of following formula (IIb) and a repeat unit of following formula (IIId):



(Ic)



(IIId)



(IIb)

Claim 19 (canceled).